

Notice of Allowability

Application No.

09/831,461

Applicant(s)

AIDA ET AL.

Examiner

Art Unit

Paulos M. Natnael

2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed 2/28/05 and phone interview of 4/28/05.
2. ☒ The allowed claim(s) is/are 4-9, renumbered as 3-6, 1-2, respectively.
3. ☒ The drawings filed on 08 May 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

DETAILED ACTION

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Terryence Chapman (Reg. No. 32,549) on April 28, 2005.

The application has been amended as follows: Claim 1 is canceled.

Allowable Subject Matter

2. Claims 4-9 are allowed.

3. The following is an examiner's statement of reasons for allowance: the prior art fails to disclose, image magnification circuit comprising: an image memory, a coefficient memory, a non-linear magnification controller for outputting an enable signal to read out corresponding image data from the image memory according to any given magnification set for n number of equal areas, each area having a width w provided by dividing the image to be displayed by n, n being an integer of at least 2, and outputting a coefficient selection address to read out a corresponding filter coefficient from the coefficient memory and a filter for filtering the image data read out from the image memory according to the filtering coefficient read out from the coefficient memory and outputting

image data processed for enlargement according to any magnification set for each of the n number of areas arranged horizontally, wherein the coefficient memory comprises a Read Only Memory for storing the predetermined filter coefficients, a memory controller for reading out the filter coefficients from the Read Only Memory according to a transfer start signal and outputting a coefficient writing address and a Read/Write selection signal, a selector selecting either of the coefficient selection address outputted from the non-linear magnification controller or the coefficient writing address outputted from the memory controller, and a coefficient Random Access Memory for storing the coefficient writing address read out from the coefficient Read Only Memory according to the coefficient writing address outputted from the selector when the Read/Write selection signal is a Write selection signal and reading out the filter coefficient according to the coefficient selection signal outputted from the selector when the Read/Write selection signal is a read selection signal, as in claim 8;

And, a non-linear magnification controller comprises an area selection signal generator for generating an area selection signal for sequentially selecting n number of areas, each having the width w , first selector for selecting for output a magnification parameter m set for a corresponding area according to the area selection signal generated by the area selection signal generator, m being a positive number no greater than n^2 and the magnification being equivalent to n^2/m , an n -bit adder for receiving, as an input, the magnification parameter m selected by the first selector, an address offset arithmetic-logic unit for calculating the start point of the coefficient selection address according to the input of the magnification parameter m set for the selection start area

of the n number of areas, a second selector selecting for output the calculated value of the address offset arithmetic-logic unit and the sum-data of the adder, a first delayer for delaying the output value of the second selector by one sampling period for output as a coefficient selection address and another input to the adder, a logical sum circuit for outputting a logical sum signal of a carry signal of the adder and an initializing signal, and a second delayer for delaying the output signal of the logical sum circuit by one sampling period for output as an enable signal to the image memory, as in claim 9;

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paulos M. Natnael whose telephone number is (571) 272-7354. The examiner can normally be reached on 10:00am - 6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (571)272-7353. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


PMN
May 2, 2005


JOHN MILLER
SUPERVISORY PATENT EXAMINER
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